

## About the Artist:

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### David C. Roy

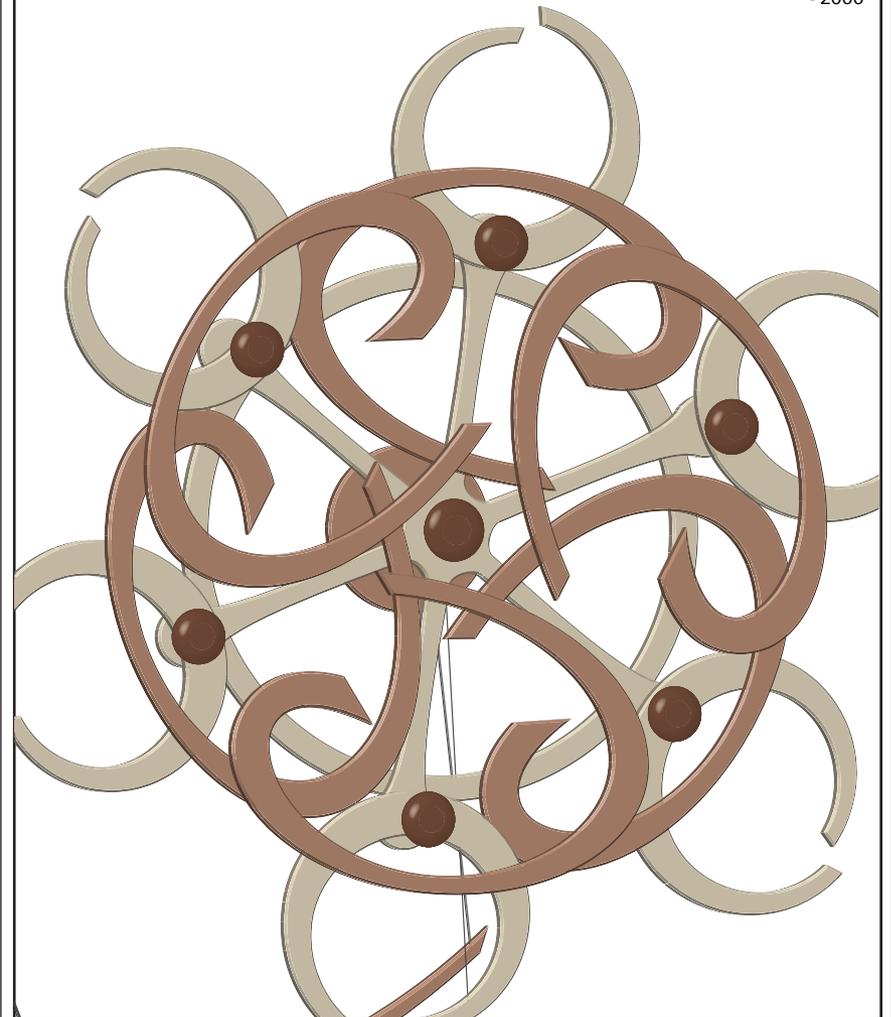
Mechanics and motion have always fascinated me. During college I studied physics, engineering and chemistry to further my understanding of how things worked. I graduated with a degree in physics from Boston University in 1974. This intuitive understanding of motion and mechanics combined with the artistic influences of my wife, Marji, led me to the creation of kinetic sculptures. In 1975 we started "Wood That Works" and I became a full time sculptor. Since then I have designed and handcrafted over 80 different limited edition and one-of-a-kind kinetic sculptures. I have exhibited in numerous juried, invitational and group events. My work is displayed in galleries and private collections around the world. I currently maintain a studio in rural northeastern Connecticut.

Wood   
that Works

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Quark Cotillion • Directions

Kinetic Sculpture by David C. Roy  
©2000



## To the Owner...

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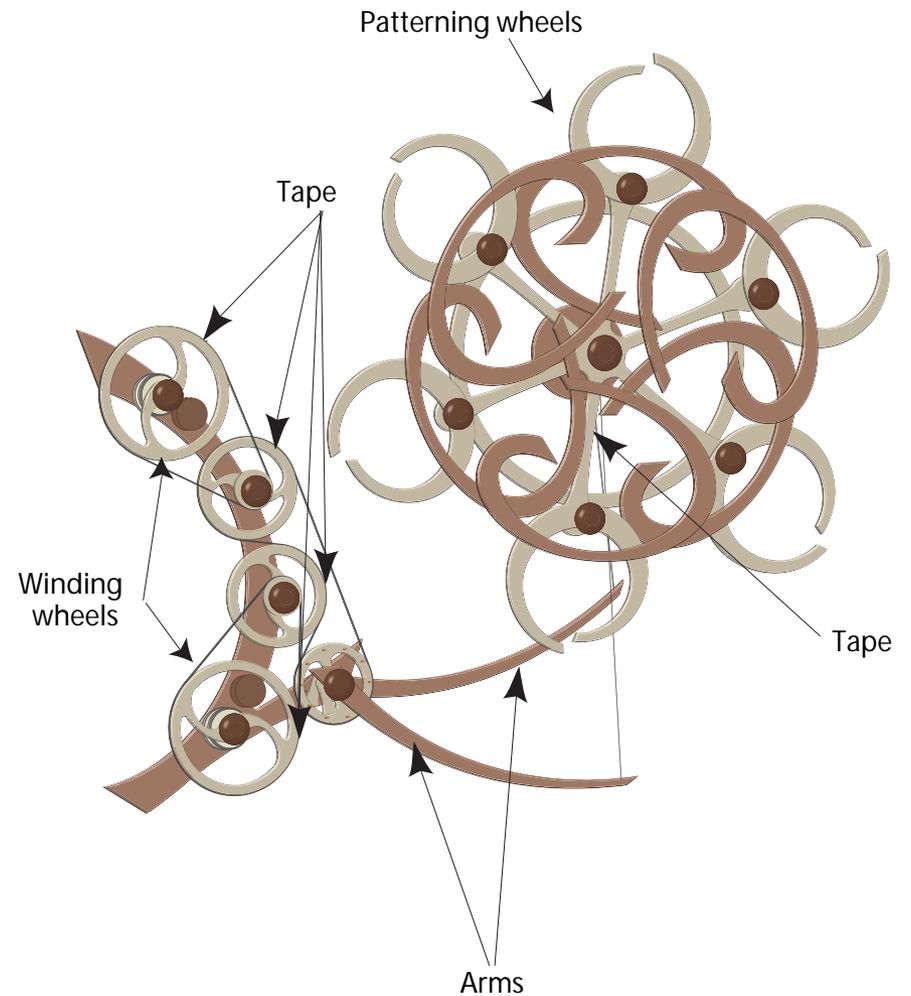
Hello,

Welcome to the world of Wood That Works. This Quark Cotillion is number \_\_\_\_\_ out of a possible 36 pieces. It was made by me during the month of \_\_\_\_\_ in 2002. I build, test and pack each sculpture myself, doing 6-12 pieces of an edition per month. It takes several years for me to complete an edition and some are never finished as I move on to new designs. Designing and building kinetic sculptures like Quark Cotillion has been my full time occupation for more than 25 years. I hope Quark Cotillion brings you and other viewers as much enjoyment as I've found in making it.

Quark Cotillion has been mounted on a wall in my shop and running for at least 10 hours before I pack it. I make every effort in design, construction and packing to make sure the piece will perform problem free for years to come. I use only the finest materials.

It leaves me happy and satisfied to find that my work has made it's way into new lives. I hope it brings you years of enjoyment.

David C. Roy



## Directions:

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### Before Moving Sculpture:

- Always tape the spring-belts and strings in place before moving the sculpture. This will save a lot of aggravation when it is time to set the piece up again.
- See the diagram for the best tape locations.

### Correct Installation of the Spring-Belts:

- Three spring-belts power and control the motion of this sculpture. It is easy to reinstall the small belts if they become knocked loose during shipping or installation. The longer belt takes a more involved path and can be a challenge to reinstall without the proper directions.
- Spring-belts tend to have minds of their own and it sometimes helps to have an extra pair of hands to install the long one.
- The long belt passes behind the smaller ones. The first step is to remove the small ones so they are out of the way. Refer to the diagram at the right and remove the small belts by popping them out of the pulley slot. Make sure you hold the drive wheel and release any stored spring tension slowly.
- Install the long belt following the pattern show in the diagram to the right. This can be frustrating and another set of hands is very helpful.
- Reinstall the short drive belts.

## About Quark Cotillion

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A quark is a hypothetical elementary subatomic particle. This sculpture reminded us of the order and chaos of the atom, hence the name. Quark Cotillion is the next generation of the motion and mechanism I first explored with my sculpture Rhapsody. I have used a series of 6 combination wheels to create a more complex and kaleidoscopic motion.

Each of the 6 combination wheels stays in a nearly fixed orientation while being orbited at a changing pace about a common center. This results in a fascinating array of constantly changing kaleidoscopic patterns. The entire assembly is powered and controlled by the mechanism on the left-hand side of the sculpture. This piece runs almost silently for about 16 hours.

## Specifications:

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Limited Edition of 36

Size: 48"h x 55"w x 7"d

Power Source: negator spring

Approximate Run Time: 16 hours

Materials: hardwood plywood,  
bearings, string

Quark Cotillion ©2000

## Directions:

### To Mount on Wall:

- DO NOT remove the tape holding the spring-belts in place.
- Hold the left-hand template against the wall in the desired location.
- Level the bottom edge.
- Temporarily attach the template to the wall using the marked screw holes in the template. Partially screw in the screws.
- Hold the right-hand side template against the left one lining up the bottom edges. Mark the screw holes.
- Remove the left-hand side template from the wall.
- Install wall anchors if necessary.
- Screw the left hand side of the sculpture to the wall using the marked holes. Be careful not to dislodge the black belts from the pulleys.
- Screw the right hand side of the sculpture to the wall using the marked holes. **NOTE:** There is a definite up and down to the right side mounting disk. Up is designated with the bold black arrow on the back of the mounting disk.
- Attach the inner string hanging from the right-hand side of the sculpture to the arm closest to the wall. Place the string under the screw eye closest to the end of the arm and then loop the end of the string over the other screw eye.
- Attach the outer string to the outer arm in the same manner.
- Remove the tape holding the strings to the upper mechanism.
- Remove the tape holding the spring-belts in place.

### To Wind:

- Turn the upper winding wheel counter-clockwise 24 turns. Turn the lower winding wheel clockwise 24 turns.

### To Start:

- If the sculpture does not start by itself after winding, gently push down on the arm that is in the uppermost position.

